

ments and differing reactions to the stimuli of pain, cold, fever, grief, etc., all point to like explanation.

The above seems to us to give the more advanced views as to causation as outlined in the multitudinous literature of the past few years.

ABSTRACTS.

Are Work and Worry Causes of Nervous Affections. By L. Harrison Mettler, *Medical Record*, Sept. 7, 1895.—The practical purpose in this essay is to advocate a combination of the physical and the mental elements in ones life as a preventive, and as a cure of neurasthenic and other nervous tendencies, and to advocate the avoidance of monotony. To not advise the athlete to turn wholly to sedentary pursuits, and habits, but to introduce these elements as a variety in his life. To not shut the studious man entirely from his books, but to balance the mental work, by the element of physical labor or enterprise. To procure for each one the balanced elements and the variety thereby secured.

The theory on which he bases this treatment, places the spinal gray matter as the central active nerve centres, while the cortical area on the one hand, and the musculo-cutaneous on the other, are both peripheral in their meaning, and must be kept in health by a well-balanced action. The initiation of motor impulses in the cortex, and the initiation of sensory impulses in the cutaneous surface, form two extremes of a balance the fulcrum of which is the gray matter of the cord. A well-balanced nervous system is made by the equitable development of each; the monotonous development of either one tends toward neurasthenia or other diseased, unstable nervous condition.

Over work does not bring break-down except it be monotonously on one side this balance, and then as a rule only when heredity has provided a poor nervous system. Worry also would be more the result than the cause of neurasthenia or mental trouble; it is "the cry of the nerves and nervous elements on the psychic side for more rest, or more exercise to restore the normal equilibrium of the whole."

Clinical Study of the Individual Insane. By Dr. H. A. Tomlinson, (*Northwestern Lancel*, August 1, 1895).—The author's purpose in this article is to advocate careful bedside observation and detailed record of the individual insane. He says it is seemingly "strange that the clinical study of the individual should not have been recognized to be as important in insanity as in general disease." He deprecates "persistence of superstition concerning the nature of mental perversion" and "the tendency in hospitals to con-

sider maintenance and discipline the most important part of the treatment of the insane."

He would study in every case the individual under four headings. Heredity and life history; anthropometry; general physical exploration with urinalysis and microscopic study as indicated, and neurological examination proper. Nurses as an adjuvant are almost essential. History is carried into both mental and bodily diseases of self and family. All menstrual and puerperal states and conditions of women are included.

Anthropometry is believed to greatly aid in prognosis,—the stigmata found by cranial measurements indicating a downward tendency. The general physical examination is like that in a general hospital, only more complex and labored by reason of the patient's inability to help. The neurological examination includes all the sensory and motor phenomena with especial stress on study of the muscles of expression.

This makes a very labored and long study, but it acts well by its impression on the patient and is more directly valuable because only by study of every physical element can we know in any especial case of the condition of each organ and each mental element; while the interdependence of the nervous system and the rest of the organism makes it an essential.

As results of such studies, in his opinion, he finds stigmata of degeneracy in all cases of insanity, the difference being one of degree; he finds the symptom groups not distinct entities; he finds, that accompanying cerebral defect, there are commonly defects elsewhere, and that mental aberrations are mainly matters of degree.

The Breaking Strain of the Ribs of the Insane.

By Alfred W. Campbell, M.D., Pathologist County Asylum, Rainhill, Lancashire (*Journal Mental Science*, April, 1895).—The paper shows a commendable painstaking effort to clear up one of those vaguely known subjects which have drifted about half believed, in the treatment of the insane, namely, "Are the ribs of the insane more fragile than those of other people." The author by tests with Dr. Chas. Mercier's specially devised apparatus, has tested in the case of fifty-seven autopsies, and moreover has made the subject much more conclusive by making microscopic studies of sections of such ribs, showing clearly the loss of, or reticulation of, the compact tissues to be the main cause.

He finds the breaking strain of the ribs in general paralytics to be below the normal, in the proportion of 62 pounds to 44.8 pounds. Of senile insanity in females 11.8 pounds represented the strain, females having a much less normal, however, than men. (About one-half.) Other insanities show in